UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/717,634	11/21/2003	Siamak Naghian	60091.00251	9140

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EXAMINER
LE, DANH C

ART UNIT	PAPER NUMBER
2617	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	03/22/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

PTOL-90A (Rev. 10/06)

	Application No.	Applicant(s)
Office Action Summary	10/717,634	NAGHIAN ET AL.
	Examiner	Art Unit	
	DANH C. LE	2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on _22 November 2006_.

2a)☒ This action is **FINAL**.　　　2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) _1-4, 6-9, 11-17, 21, 22, 24-30, 32-35 and 37-47_ is/are pending in the application.

　　4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) _1-4, 6, 7, 9, 11-17, 22, 24-30, 32, 33, 35 and 37-47_ is/are rejected.

7)☒ Claim(s) _8, 21 and 34_ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

　　Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

　　Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

　　a)☐ All　b)☐ Some * c)☐ None of:

　　　　1.☐ Certified copies of the priority documents have been received.

　　　　2.☐ Certified copies of the priority documents have been received in Application No. _____.

　　　　3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

　　* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _11 16 06_

4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ .

5) ☐ Notice of Informal Patent Application

6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

1. **Claims 42-47 are rejected under 35 U.S.C. 102(e) as being anticipated by**

   Amirijoo (US 6,728,217).

   As to claim 42, Amirijoo teaches a mobile station for use in a cellular communication

system comprising cells (figures 3A, 3B and their description), the mobile station being

configured to:

   collect bit rate information related to the mobile station by measuring (step 302),

when the mobile station has a connection to at least a first cell, a bit rate provided to the

mobile station by the first cell and/or a bit rate provided to the mobile station by a

second cell; and

   use the bit rate information to decide on when handover of the mobile station from

a first cell to the second cell should be carried out by triggering the execution of

handover of the mobile station from the first cell to the second cell when the bit rate

provided by the first cell and/or the bit rate provided by the second cell fulfils a

predetermined condition(steps 310-332).

As to claim 43, the claim is a method claim of claim 42; therefore the claim is interpreted and rejected as set forth as claim 42.

As to claim 44, Amirijoo teaches a cellular communication (figure 2 and its description) system comprising:

Cells (22a, 22b); and

mobile wherein the system (23) is configured to collect bit rate information related to the mobile station by measuring a bit rate provided to the mobile station by a first cell and/or a bit rate provided to the mobile station by a second cell; and

use the bit rate information for deciding on mobile station handover from the first cell to the second cell such that the system is configured to decide to trigger the execution of handover of the mobile station from the first cell to the second cell when the bit rate provided by the first cell and/or the bit rate provided by the second cell fulfils a predetermined condition(figure 2, steps 310-332).

As to claim 45, the claim is a system claim of claim 42; therefore, the claim is interpreted and rejected as set forth as claim 42.

As to claim 46, Amirijoo teaches a mobile station for use in a cellular communication system (figures 2, 3 and their descriptions) comprising cells (22a, 22b), the mobile station (20) being configured to collect bit rate information related to the mobile station by measuring a bit rate provided to the mobile station a first cell and/or a bit rate provided to the mobile station by a second cell (col.4, lines 19-42); and

use the bit rate information for deciding on handover of the mobile station from the first cell to the second cell such that the mobile station is con-figured to decide to

trigger the execution of handover of the mobile station from the first cell to the second

cell when the bit rate provided by the first cell and/or the bit rate provided by the second

cell fulfils a predetermined condition(figure 3a, steps 310-332).

As to claim 47, the claim is a mean plus function claim of claim 46; therefore, the

claim is interpreted and rejected as set forth as claim 46.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. <u>Claims 1-4, 6, 7, 9, 11-17, 19, 20,, 22, 26-30, 32, 33, 35, 39-41are rejected under</u>

   <u>35 U.S.C. 103(a) as being unpatentable over Amirijoo in view of Santhoff (US</u>

   <u>6,907244).</u>

As to claim 1, Amirijoo teaches a method for deciding on handover in a cellular

communication system (figures 3A, 3B and their descriptions) comprising:

collecting bit rate information related to a mobile station (steps 300-308), wherein

the mobile station initially has a connection to at least the first cell providing a certain bit

rate to the mobile station, the collecting comprising measuring the bit rate provided to

the mobile station by the first cell and/or a bit rate provided to the mobile station by the

second cell; and

using the bit rate information for deciding on when handover of the mobile station

from the first cell to a-the second cell should be carried out by triggering the mobile

station handover from the first cell to the second cell when the bit rate provided by the first cell and/or the bit rate provided by the second cell fulfils a predetermined condition(steps 310-332).

Amirijoo fails to teach when the mobile station is moving from a first cell to a second cell. Santhoff teaches when the mobile station is moving from a first cell to a second cell (col.6, lines 17-25). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the teaching of Santhoff into the system of Amirijoo in order to hands-offs between cell sites in a ultra-wideband communication system.

As to claim 2, Amirijoo teaches the method of claim 1, wherein the bit rate information comprises at least one of the following: the bit rate provided to the mobile station by the first cell, a bit rate provided to the mobile station by at least one other cell, a bit rate requested by the mobile station (figure 3a, 318, 320).

As to claim 3, Amirijoo teaches the method of claim 1, wherein the decision on handover of the mobile station from the first cell to the second cell comprises deciding on whether handover should be carried out (step 312, 315, 332).

As to claim 4, Amirijoo teaches the method of claim 1, wherein the decision on handover of the mobile station from the first cell to the second cell comprises deciding on to which cell handover of the mobile station should be made (step 312, 315, 332).

As to claim 6, Amirijoo teaches the method of claim 1, wherein information about traffic distribution in the system is utilized when deciding on handover of the mobile station (step 312, 315, 332).

As to claim 7, Amirijoo teaches the method of claim 1, wherein information about capacity provided by the system in different parts of the system is utilized when deciding on handover of the mobile station (step 312, 315, 332).

As to claim 9, Amirijoo teaches the method of claim 3, further comprising defining a handover profile which defines preferable cell(s) for each bit rate, whereby the handover profile is used when deciding on handover of the mobile station (step 320).

As to claim 11, Amirijoo teaches the method of claim 1, wherein the predetermined condition requires that the bit rate is lower than a predetermined limit value, higher than a predetermined limit value or between two predetermined limit values (figure 5).

As to claim 12, Amirijoo teaches the method of claim 11, wherein the limit value(s) is (are) based on the variation of the bit rate provided by the first cell and/or the bit rate provided by the second cell (figure 5).

As to claim 13, Amirijoo teaches the method of claim 1, wherein the first cell and the second cell belong to different radio access systems or to the same radio access system (col.3, lines 7-23).

As to claim 14, the claim is the system claim of claim 1; therefore, the claim is interpreted and rejected as set forth as claim 1.

As to claim 15, the claim is the system claim of claim 2; therefore, the claim is interpreted and rejected as set forth as claim 2.

As to claim 16, the claim is the system claim of claim 3; therefore, the claim is interpreted and rejected as set forth as claim 3.

As to claim 17, the claim is the system claim of claim 4; therefore, the claim is interpreted and rejected as set forth as claim 4.

As to claim 19, the claim is the system claim of claim 6; therefore, the claim is interpreted and rejected as set forth as claim 6.

As to claim 20, the claim is the system claim of claim 7; therefore, the claim is interpreted and rejected as set forth as claim 7.

As to claim 22, the claim is the system claim of claim 9; therefore, the claim is interpreted and rejected as set forth as claim 9.

As to claim 26, the claim is the system claim of claim 13; therefore, the claim is interpreted and rejected as set forth as claim 13.

As to claim 27, the limitation of claim is the same limitation of claim of claim 1; therefore, the claim is interpreted and rejected as set forth as claim 1.

As to claim 28, the limitation of claim is the same limitation of claim of claim 2; therefore, the claim is interpreted and rejected as set forth as claim 2.

As to claim 29, the limitation of claim is the same limitation of claim of claim 3; therefore, the claim is interpreted and rejected as set forth as claim 3.

As to claim 30, the limitation of claim is the same limitation of claim of claim 4; therefore, the claim is interpreted and rejected as set forth as claim 4.

As to claim 32, the limitation of claim is the same limitation of claim of claim 6; therefore, the claim is interpreted and rejected as set forth as claim 6.

As to claim 33, the limitation of claim is the same limitation of claim of claim 7; therefore, the claim is interpreted and rejected as set forth as claim 7.

As to claim 35, the limitation of claim is the same limitation of claim of claim 9;

therefore, the claim is interpreted and rejected as set forth as claim 9.

As to claim 39, Amirijoo teaches the system element of claim 27, wherein the

system element is a radio network controller (figure 2, 23).

As to claim 40, Amirijoo teaches the system element of claim 27, wherein the

system element is the mobile station (figure 1, 20).

As to claim 41, the limitation of claim is the same limitation of claim of claim 13;

therefore, the claim is interpreted and rejected as set forth as claim 13.

Response to Arguments

Applicant's arguments with respect to claims 1-4, 6-9, 11-17, 21, 22, 24-30, 32-

35, 37-47 have been considered but are moot in view of the new ground(s) of rejection.

Allowable Subject Matter

Claims 8, 21, 34 are objected to as being dependent upon a rejected base claim,

but would be allowable if rewritten in independent form including all of the limitations of

the base claim and any intervening claims.

As to claims 8, 21,34, the teaching of above prior arts either alone or in

combination fails to teach further comprising defining sub-areas within the coverage

area of the system, and defining preferable bit rates for each sub-area, whereby so

defined sub-area information is used when deciding on handover of the mobile station.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in

this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).
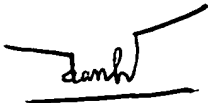
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DANH C. LE whose telephone number is 571-272-7868. The examiner can normally be reached on 8:00AM-5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, WILLIAM TROST can be reached on 571-272-7872. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

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USPTO Customer Service Representative or access to the automated information

system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

February 12, 2006

DANH LE

PRIMARY EXAMINER